

a set of shutter strips, each (a) associated with at least one of the imaging lines, (b) situated in front of each so-associated imaging line outside the image-producing component, and (c) being switched during operation of the display between a light-transmissive state and a light-absorptive state, the shutter strips comprising parts of a liquid-crystal structure in which each shutter strip comprises (i) a different corresponding one of a set of laterally separated first electrical conductors, (ii) a portion, situated opposite the corresponding first conductor, of a second electrical conductor spaced apart from the first conductor, and (iii) liquid-crystal material situated between the corresponding first conductor and the portion of the second conductor; and

a control component that utilizes light in causing the shutter strips to be selectively placed in their light-transmissive and light-absorptive states.--

Cancel the revision made to Claim 98 in the Amendment submitted 9 October 2001 and, in place of that revision, amend Claim 98 to read as follows:

--98. (Twice amended) A display as in Claim 97 wherein:
the host liquid crystal ~~comprises~~ cholesteric liquid crystal; and
the guest pleochroic dye comprises ~~black~~ dichroic dye.--

Amend Claim 104 to read as follows:

--104. (Twice amended) A display as in Claim 98 wherein the black dichroic dye has a concentration of 0.1 - 10 wt % in the host liquid crystal.--

Cancel Claim 106 without prejudice.

Amend Claims 107 and 129 to read as follows:

--107. (Amended) A display as in Claim 66 wherein, in addition to the shutter strips, the liquid-crystal structure includes:
a third electrical conductor; and

LAW OFFICES OF
SKJERNEN MORRILL
MacPHERSON LLP

25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110
(408) 453-9200
FAX (408) 453-7919

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a group of switches physically connected to the third conductor, each switch physically connected to a different corresponding one of the first conductors and being operable to electrically couple the corresponding first conductor to the third conductor when sufficient light from an associated one of the control elements strikes that switch or to electrically decouple the corresponding first conductor from the third conductor when sufficient light from an associated one of the control elements strikes that switch.

129. (Amended) A method comprising the steps of:

producing an image by regularly updating each of a multiplicity of imaging lines of an image-producing component to provide light that produces part of the image;

switching each of a set of shutter strips, each associated with at least one of the imaging lines and being situated in front of each so-associated imaging line outside the image-producing component, between a light-transmissive state and a light-absorptive state, the shutter strips comprising parts of a liquid-crystal structure in which each shutter strip comprises (i) a different corresponding one of a set of laterally separated first electrical conductors, (ii) a portion, situated opposite the corresponding first conductor, of a second electrical conductor spaced apart from the first conductor, and (iii) liquid-crystal material situated between the corresponding first conductor and the portion of the second conductor; and

utilizing light to cause the shutter strips to be selectably placed in their light-transmissive and light-absorptive states.

Cancel Claims 146 – 154 without prejudice.

Enclosed is an appendix which indicates how the current versions of Claims 66, 98, 104, 107, and 129 are produced from the previous versions of those claims. In the appendix, added material is underlined, and deleted material is in brackets.

LAW OFFICES OF
SKJERVEN MORRILL
MacPHERSON LLP

25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110
(408) 453-9200
FAX (408) 453-7979

Add new Claims 155 – 161 as follows:

--155. A display comprising:

an image-producing component having a multiplicity of imaging lines for producing an image, each imaging line being regularly updated to provide light that produces part of the image;

a set of shutter strips, each (a) associated with at least one of the imaging lines, (b) situated in front of each so-associated imaging line outside the image-producing component, and (c) being switched during operation of the display between a light-transmissive state and a light-absorptive state, the shutter strips constituting parts of a liquid-crystal structure in which liquid-crystal material comprises host cholesteric liquid crystal and guest black dichroic dye, part of the liquid-crystal material being present in each shutter strip and, when that shutter strip is in its light-absorptive state, having a cholesteric twist of at least 180°; and

a control component that utilizes light in causing the shutter strips to be selectively placed in their light-transmissive and light-absorptive states.

156. A display as in Claim 155 wherein the cholesteric twist of each shutter strip in its light-absorptive state is at least 360°.

157. A display as in Claim 155 wherein the cholesteric twist of each shutter strip in its light-absorptive state has a twist pitch of no more than 5 μm .

158. A display as in Claim 157 wherein the twist pitch of each shutter strip in its light-absorptive state is no more than 3 μm .

159. A display as in Claim 157 wherein the liquid-crystal material is no more than 10 μm in thickness.

LAW OFFICES OF
SKJERNEN MORRILL
MacPHERSON LLP

25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110
(408) 453-9200
FAX (408) 453-7979

160. A display as in Claim 155 wherein the black dichroic dye has a concentration of 0.1 - 10 wt % in the host cholesteric liquid crystal.

161. A display as in Claim 160 wherein the concentration of the black dichroic dye is 0.5 - 5 wt %.--

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SKJERVEN MORRILL
MacPHERSON LLP

25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110
(408) 453-9200
FAX (408) 453-7979